

### **ABSTRACT**

The invention relates to a device for varying a compression ratio in an internal combustion engine comprising at least one cylinder (10) provided with a combustion chamber (20), a movable element provided with a piston (14) which is translationally displaceable by means of a connecting rod (16) connectable thereto by an axis (24) and to the crank pin (34) of a crankshaft (36). The piston moves between a top dead center and a lower dead center allowing a dead volume (40, 118) at the top dead center of the piston. The invention also comprises a rotatable towed cam (42) which makes possible varying the compression ratio and means (32, 78a, 78b) for controlling the cam displacement. According to the invention, the control means comprises a fluid actuator (76) provided with a sliding block (54) arranged in a receiver (56) which is formed in a support (58) and limits two fluid chambers (75a, 75b) connected to at least one closed circuit (77; 78a, 78b).